

2011 Military Health System Conference

Big Things on the Horizon for
Electronic Health Records and
Communication with our Partners

The Quadruple Aim: Working Together, Achieving Success

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January 26 2011



Agenda



- James A Lovell Federal Health Care Center (JAL FHCC)
- Virtual Lifetime Electronic Record (VLER)
- Electronic Health Records (EHR) Way Forward
- National Health Focus

JAL FHCC



- First single, Fully Integrated Federal Health Care Center Between the VA and DoD
- Designed to improve access, quality, and cost effectiveness of health care delivery to beneficiaries of both DoD and VA

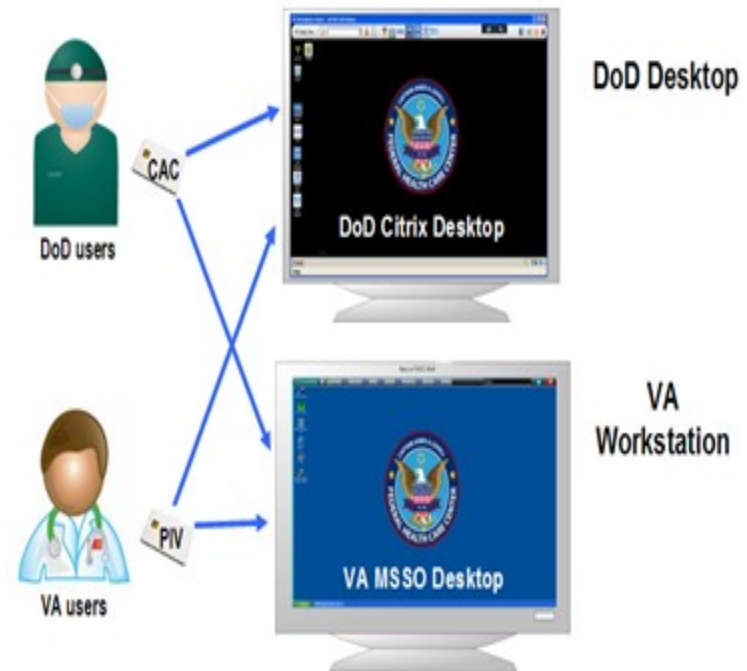
JAL FHCC Capabilities Delivered



- **Single Patient Registration**

- Sign on once with a DoD CAC or VA PIV

- **Medical Single Sign-On**
 - Find a patient one time in any application and other applications follow automatically



JAL FHCC Future Capabilities



– Orders Portability (OP) for Laboratory and Radiology

- View, manage and display in a computable format
- Display images within either VHA or DoD imaging systems

– OP Pharmacy

- Reconcile medication and allergies for all patients; reachable 24/7 for discharge medications

– OP Consults

- Will allow consults and referral orders for processing for all patients using either DoD or VA health information system



JAL FHCC- Screen Shots

Patient information is automatically found & displayed in other applications (context) including VistA & CPRS

Scheduled Appointments for ZZTEST,GLOBAL

Press <Return> to choose pre-selected appointment or use the SELECT key to de-select appointment or select an alternate appointment.

Linking of orders provides workload credit to the clinic associated with the appointment.

Date/Time	Clinic/Div	HCP	MEPRS/DMIS	Type	Status	Reason
* 15Dec@1200	BTFP/200H	QQQCHCSIITESTDOCTOR,	B6AA/0056	ACUT	KEPT	AHLTA
13Dec@1529	BTFP/200H	QQQCHCSIITESTDOCTOR,	B6AA/0056	ACUT	KEPT	AHLTA
05Dec@1152	BTFP/200H	LEE,NORMAN	B6AA/0056	OPAC	KEPT	AHLTA
04Dec@1556	INTM/200H	MALDONADO,FRANK A	BAAA/0056	ACUT	KEPT	AHLTA

VISTA North Chicago (vista.northchicago.med.va.gov)

User Utility Menu ...

Select Rad/Nuc Med Total System Menu Option: patient Profile Menu

Detailed Request Display

Display Patient Demographics

Exam Profile (selected sort)

Outside Films Profile

Profile of Rad/Nuc Med Exams

Select Patient Profile Menu Option: detailed Request Display

Select PATIENT NAME: zztest,global GLOBAL ZZTEST,GLOBAL 1-1-80 309010

180P **Pseudo SSN** NO NSC VETERAN

WARNING : ** This patient has been flagged with a Bad Address Indicator.

Enrollment Priority: GROUP 8g Category: NOT ENROLLED End Date: 01/17/2003

*** WARNING ***

*** PATIENT ENROLLMENT ENDED EFFECTIVE 01/17/2003 ***

* The health record above contains sample test data used for demonstration purposes

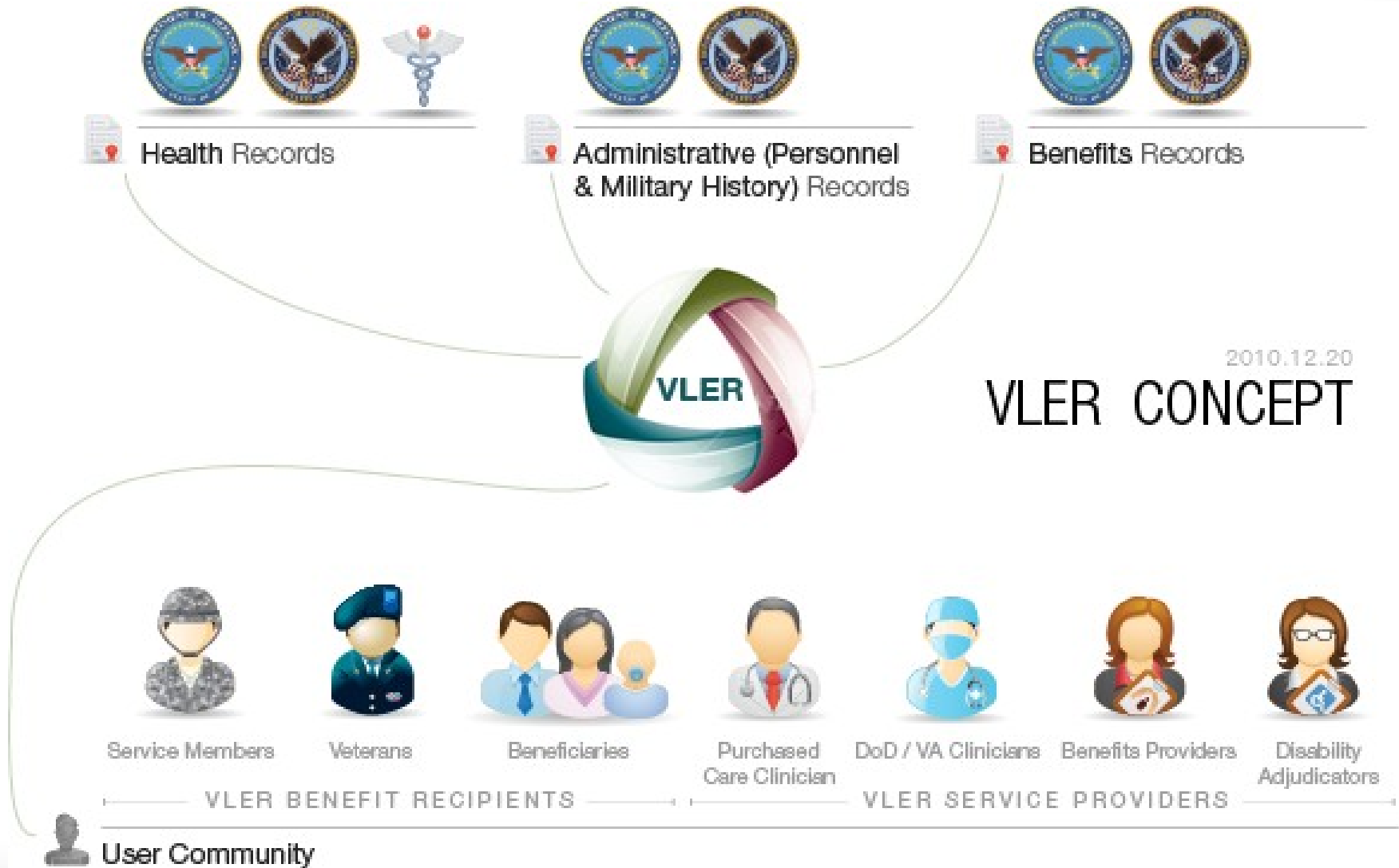
JAL FHCC Challenges



- Complexity
 - Systems & Networks
 - Identity
 - Configuration Control

- Change Management

VLER Concept



VLER CONCEPT

VLER Capability Areas & Points of View



VCA 4: Single Virtual Access Point for Health & Benefits: Self Help for Service Members & Veterans

VCA 4

Veteran Master Identity

VCA 2: Health Data Exchange for Veterans Benefits Administration & Social Security Administration Disability Benefits: Adjudicators Helping Service Members and Veterans

VCA 1



VCA1: Foundational Clinical Health Data Exchange via Nationwide HIN: Clinicians Caring for Service Members & Veterans

VCA 2



VCA 3



VCA 3: Data Exchange for Housing, Insurance, Education & Memorial Benefits: Benefit Providers Helping Service Members and Veterans

Benefit and Service Providers



VLER Phase 1A Pilot Accomplishments



Tidewater Pilot

- Successful demonstration of capability to exchange data through NwHIN
- Beta testing, HHS CONNECT software
- On-boarding process for admitting new members to NwHIN

San Diego Pilot

- Demonstrated health information can be exchanged using NwHIN

VLER Tidewater C32 Data Exchange



MedVirginia Solutions - Lifescope Department of Veterans Affairs Department of Defense Summary Continuity of Care Document

MedVirginia

Continuity of Care Document

NOTE: This C32 may not constitute a complete record.

Summarization of Episode Note

Created On: October 6, 2010

Patient: CHDRONE CHDRZZZTESTPATIENT 1234 Main St LA JOLLA, CA, 92038	Patient ID: 1017217188V293033	
Birthdate: [REDACTED]	Gender: M	Marital Status: Married
Language(s): ENG	Religious Affiliation:	
Source: Department of Veterans Affairs		

Table of Contents

- [Allergies](#)
- [Problems/Conditions](#)
- [Medications - Prescription and Non-Prescription](#)
- [Vital Signs](#)
- [Lab Results - Chemistry and Hematology](#)
- [Immunizations](#)

Allergies

Allergens	Reaction	Severity	Verification Date	Source	Event Type	Comments
CHOCOLATE	RASH	--	28 Aug 2010	EAST ORANGE VA 52N JERSEY HCS	Adverse reaction to substance	This VA Document contains all allergies for the patient, from all VA treatment facilities, but it does not contain allergies that were deleted or entered in error.
PENICILLIN	DRY MOUTH, URTICARIA	--	14 Jan 2010	HAMPTON (VAMC)	Adverse reaction to drug	This VA Document contains all allergies for the patient, from all VA treatment facilities, but it does not contain allergies that were deleted or entered in error.
ONYXODONE	ANXIETY	--	14 Jan 2010	HAMPTON (VAMC)	Adverse reaction to drug	This VA Document contains all allergies for the patient, from all VA treatment facilities, but it does not contain allergies that were deleted or entered in error.
SHELLFISH	RASH, DIARRHEA	--	23 Sep 2009	SAN DIEGO HCS	Adverse reaction to food	This VA Document contains all allergies for the patient, from all VA treatment facilities, but it does not contain allergies that were deleted or entered in error.
ASPIRIN	RASH, ITCHING OF EYE	--	23 Sep 2009	SAN DIEGO HCS	Adverse reaction to drug	This VA Document contains all allergies for the patient, from all VA treatment facilities, but it does not contain allergies that were deleted or entered in error.
WATERFOWL	ITCHING OF EYE, DIARRHEA, SWELLING	--	14 Dec 2009	SAN DIEGO HCS	Adverse reaction to food	This VA Document contains all allergies for the patient, from all VA treatment facilities, but it does not contain allergies that were deleted or entered in error.
PEANUTS	RASH, SWELLING	--	18 Dec 2009	SAN DIEGO HCS	Adverse reaction to substance	This VA Document contains all allergies for the patient, from all VA treatment facilities, but it does not contain allergies that were deleted or entered in error.

* The health record above contains sample data used for demonstration purposes

Joint EHR Modernization Objectives



- “EHR modernization efforts provide the opportunity to implement standards-based Health IT solutions that will modernize existing Department EHR capabilities...and (provide) reduced sustainment costs.” *

To achieve these objectives, the Departments will widely integrate business requirements, acquisition and technical approaches.

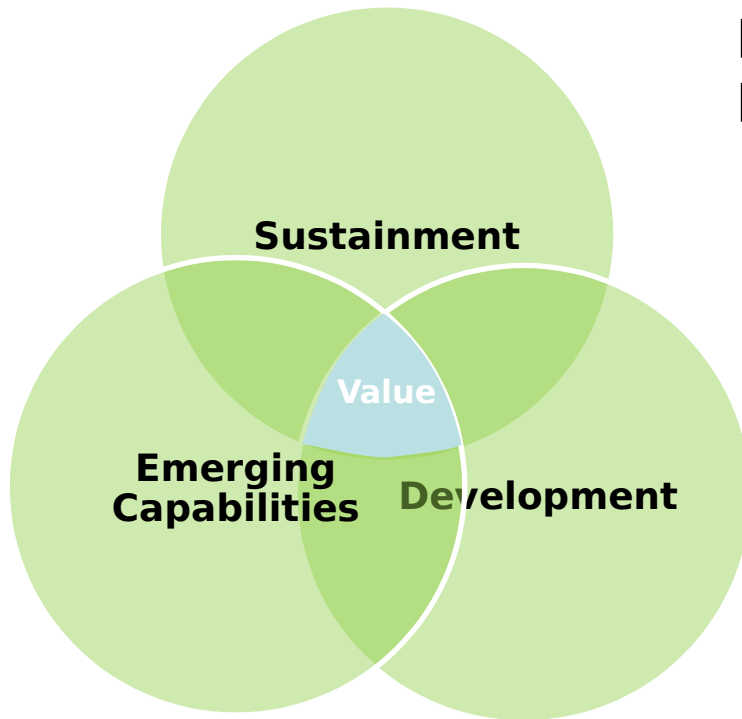
*Joint Executive Council and Health Executive Council Report to Congress
(RTC) on
Defense and Department of Veterans Affairs Medical Information
Technology.

Joint EHR Modernization Objectives



- Both Departments are working toward common objectives:
 - Effectiveness:
 - Provide a patient-centric health care experience
 - Improve the quality of delivered services
 - Ensure interoperability and data sharing between the departments
 - Efficiency:
 - Reduce overall cost of Health IT investments in acquisition, development and sustainment

EHR Transformation Focus



- Clinical Informatics
- System Engineering
- Interagency Synchronization

Military Health System EHR Efforts

Sustainment

- Availability, Usability, Speed
- Establish a reasonable baseline (Theater & Garrison)
- Right people in the right seats
- Patient safety/compliance

Development

- Engineering & Innovation
- Integration/Interoperability
- Repurposing

Emerging Capabilities

- Functional & Technical testing labs
- Balance of Theater/Garrison priorities
- DoD/VA synchronization

Mission Focused EHR Way Ahead Approaches*



Figure 1: VA EHR Modernization Strategy
VA Approach

- Employ an iterative, collaborative approach to evolving business processes
- Leverage commercial innovation (open source)
- Provide architecture and data management guidelines (SOA)
- Build from VistA legacy using new application interface

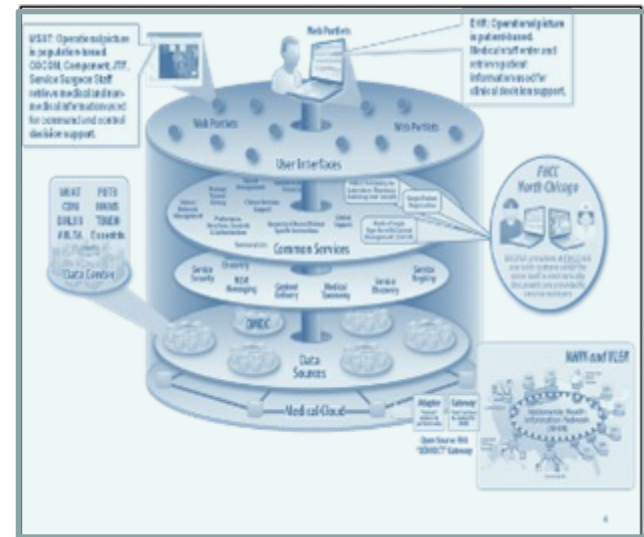
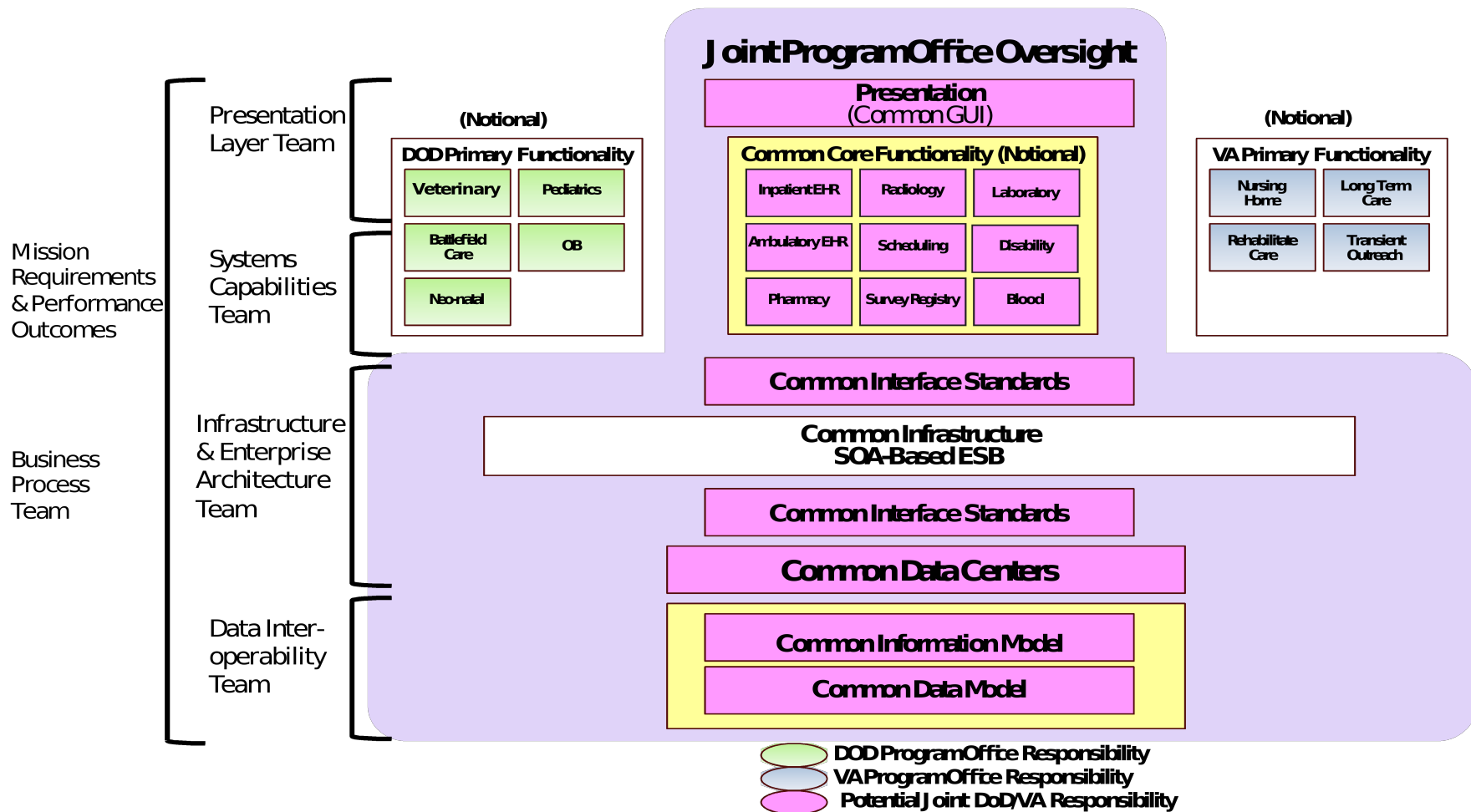


Figure 2: MHS Technical Modernization Strategy
DoD Approach

- Develop detailed “to be” workflow processes
- Use commercial off the shelf (COTS) software without modifications where possible
- Innovate at applications layer while using core common enterprise services (SOA)
- Use modular COTS upgrades to transition from legacy

* From Joint DoD and VA Health IT Modernization Way Forward briefing (7 October 2010)
2011 MHS Conference

Common Design Pattern & Framework



EHR - Where We Are Now



DoD/VA interagency teams (working the “what”):

- Mission requirements and performance outcomes
- Business processes
- Presentation layer
- Systems capabilities
- Infrastructure and enterprise architecture
- Data interoperability

Target outputs for path forward (addressing the “how”):

- Agreement on a common vision and definition of an interagency EHR
- Produce a Clinical Interoperability Framework & Common Clinical Data Model
- Develop a Common Business Reference Model/Capability Taxonomy
- Establish a prioritized Common Clinical EHR Capability
- Develop a Common User Interface using user/patient centric agile


Intuitive Interface




** The health record above contains sample data used for demonstration purposes*




The Blue Button- VA

**UNITED STATES
DEPARTMENT OF VETERANS AFFAIRS**

VA Home



May 2010
**Women's Health
Month**



VA Facility Locator | About MHV | Help | FAQs | Contact MHV | Search:

GO


HOME | PERSONAL INFORMATION | PHARMACY | RESEARCH HEALTH | GET CARE | TRACK HEALTH | MHV COMMUNITY

IN CASE OF EMERGENCY | PROFILES | ACCOUNT | HEALTH INFORMATION CARD

Personal Information


My HealtheVet (MHV) has made it easy to keep track of your Personal Information. MHV is all about you and your health. Part of your personal online health journal is your identification. When you registered for My HealtheVet, you entered important information about yourself. This is where you'll find it, along with other important facts like your login information, blood type and emergency contacts.

In Case of Emergency




Keep your emergency contacts in one place...
[More »](#)

My Profile




Your name, address and identifying information...
[More »](#)

Download your Data




Download, print, or share VA health data. It is simple, safe and reliable.
[More »](#)

My Account



Manage your account, in-person authentication...
[More »](#)

Change your Password



Change your My HealtheVet password here...
[More »](#)

Member Logout

Logout

Quick Links

- [VA National Suicide Prevention Hotline](#)
If you are in crisis call:
1-800-273-TALK (8255)
- [In-Person Authentication](#)
- [Flu Information](#)
- [My HealtheVet Learning Center](#)
- [VA Mental Health Services](#)
- [View the MHV](#)

View My Links Information (self-entered)
(Personal Health Journal of)



The Blue Button- TRICARE

[Home](#) [Resource Center](#) [My Profile](#) [Family Profile](#) [Logout](#)



Welcome to TRICARE Online!
TRICARE Online features secure access to beneficiary appointments, prescriptions, and personal health data.

Welcome, [Redacted]

 [Secure Messaging Pilot Program](#)

 [Need Help? MHS Help Desk 1-800-600-9332 \(CONUS\) or 1-866-637-8725 \(OCNUS\)](#)

[Looking for information about your benefits? Visit the TRICARE Beneficiary Site](#)



Beneficiary Home

Your Family's Sponsor is [Redacted] [Help](#)

Name	Date of Birth	Gender	Primary MTF
[Redacted]			

Family Member list last updated: 11/19/10 3:59 PM [Refresh list of family members](#)

Appointment Center [Help](#)



Notice: This site should not be used for emergency medical conditions. In the case of a medical emergency, call 911 or contact your local Emergency Medical Service.

Select Family Member: [Go](#)

Book an Appointment for Myself

Select the visit reason from the list, click on the "View Appointments" button, and follow the steps.

MTF Site Message: MTF Specific Appointing Text

Select Visit Reason: [View Appointments](#)


View or Cancel Appointments for Myself

There are no future appointments currently booked.

Announcements [view all](#)

+ [Coming soon: TRICARE Online family member booking!](#)

+ [Ensure you have access to upcoming TRICARE Online features!](#)



Accessing your **Personal Health Data**, containing your labs, allergy profile, medication profile, problem list, and encounters.

Refill



Refill and check status of your prescriptions. Access Mail Order Pharmacy

CHART



Access **CHART**, the Consolidated Health Assessment Reporting Tool, which combines health assessment and deployment-related questionnaires in one place.

eForms



Access **eForms** to complete your health-related paperwork electronically, prior to your appointment.

REPORT TO THE PRESIDENT
REALIZING THE FULL POTENTIAL OF
HEALTH INFORMATION TECHNOLOGY
TO IMPROVE HEALTHCARE
FOR AMERICANS:
THE PATH FORWARD

Executive Office of the President
President's Council of Advisors
on Science and Technology

December 2010



Wrap-Up



- Expectations for future VLER pilots and the future of the Virtual Lifetime Electronic Record
- Alternatives for the EHR Way Ahead
- Role of patients in future clinical work flow
- National focus on health care